

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (canceled)

2. (currently amended) A method of determining performance impact of individual components of a power plant on overall thermal performance of the power plant, the method comprising:

(a) designing a first thermal model of the power plant using original specification data of the power plant;

(b) developing a second thermal model of the power plant from measured performance data of each component of the power plant;

(c) determining the performance impact of a selected component of the power plant on the overall thermal performance of the power plant by substituting design performance data of the selected component in the first thermal model with its measured performance data; and

~~The method as in claim 1, further comprising:~~

(d) repeating step (c) until the performance impact of each component of the power plant on the overall thermal performance of the power plant is determined.

3. (currently amended) The method as in claim 12, further comprising:
displaying the performance impact of each component on the overall thermal
performance of the power plant.

4. (canceled)

5. (currently amended) A method of determining performance impact
of individual components of a power plant on overall thermal performance of the power
plant, the method comprising:

(a) designing a first thermal model of the power plant using original
specification data of the power plant;

(b) developing a second thermal model of the power plant from measured
performance data of each component of the power plant; and

(c) determining the performance impact of a selected component of the power
plant on the overall thermal performance of the power plant by substituting design
performance data of the selected component in the first thermal model with its measured
performance data;

wherein step (a) comprises:

i. receiving original specification data in a computer system; and

ii. processing the specification data to design the first thermal model;

and

~~The method as in claim 1, wherein step (b) comprises:~~

- i. measuring performance data of each component of the power plant;
- ii. storing measured performance data in ~~the~~ a data acquisition computer;
- iii. receiving the measured performance data from the data acquisition computer in a processor system; and
- iv. processing data received in the processor system to design the second thermal model.

6. (canceled)

7. (currently amended) An apparatus for determining performance impact of individual components of a power plant on overall thermal performance of the power plant, comprising:

means for designing a first thermal model of the power plant using original specification data of the power plant;

means for developing a second thermal model of the power plant from measured performance data of each component of the power plant;

means for determining the performance impact of a selected component of the power plant on the overall thermal performance of the power plant by substituting design

performance data of the selected component in the first thermal model with its measured performance data; and

~~The apparatus as in claim 6, further comprising:~~

means for repeating the determining step until the performance impact of each component of the power plant on the overall thermal performance of the power plant is determined.

8. (currently amended) The apparatus as in claim ~~6~~7, further comprising:

means for displaying the performance impact of each component of the power plant on the overall thermal performance of the power plant.

9. (canceled)

10. (currently amended) An apparatus for determining performance impact of individual components of a power plant on overall thermal performance of the power plant, comprising:

means for designing a first thermal model of the power plant using original specification data of the power plant;

means for developing a second thermal model of the power plant from measured performance data of each component of the power plant;

means for determining the performance impact of a selected component of the power plant on the overall thermal performance of the power plant by substituting design performance data of the selected component in the first thermal model with its measured performance data;

means for receiving original specification data;

means for processing the specification data to design the first thermal model;

means for measuring the performance of each component of the power-plant;

means for storing measured performance data;

~~The apparatus as in claim 9, further comprising:~~

means for receiving the measured performance data; and

means for processing received data to design the second thermal model.

11. (canceled)

12. (currently amended) A computer program product comprising a computer useable medium having computer program logic stored thereon for enabling a processor in a computer system to process data, said computer program product comprising:

means for designing a first model using original specification data of a power plant;

means for developing a second model from measured performance data of each component of the power plant;

means for determining the performance impact of a selected component of the power plant on the overall thermal performance of the power plant by substituting design performance data of the selected component in the first model with its measured performance data;

~~The computer program product as in claim 11, further comprising:~~

means for repeating the determining step until the performance impact of each component of the power-plant on the overall thermal performance of the power-plant is determined; and

means for displaying the performance impact of each component of the power plant on the overall thermal performance of the power plant.

13-14. (canceled)

15. (currently amended) A computer program product comprising a computer useable medium having computer program logic stored thereon for enabling a processor in a computer system to process data, said computer program product comprising:

means for designing a first model using original specification data of a power plant;

means for developing a second model from measured performance data of each component of the power plant;

means for determining the performance impact of a selected component of the power plant on the overall thermal performance of the power plant by substituting design performance data of the selected component in the first model with its measured performance data; and

wherein the designing means comprises:

means for receiving original specification data; and

means for processing the specification data to design the first model;

wherein the developing means comprises:

means for measuring the performance of each component of the power plant; and

means for storing measured performance data;

~~The computer program product as in claim 14, further comprises:~~

means for receiving the stored measured performance data; and

means for processing received data to design the second model.

16. (canceled)

17. (currently amended) A computer-based method for providing assistance to a user of an application program for assessing the performance impact of

individual components of a power plant on overall thermal performance of the power-plant, the method comprising the steps of:

(a) using the application program to design a plant thermal model from original power-plant specification data;

(b) using the application program to design a matched thermal plant model from measured performance data of individual components of the power-plant;

(c) substituting design performance data, of a selected component of the power plant, in the plant thermal model with its measured performance data; and

~~The computer-based method as in claim 16, further comprising:~~

(d) repeating step (c) for each component of the power plant.

18. (currently amended) A computer-readable medium having computer-executable instructions for performing the steps of:

(a) designing a first thermal model of the power plant using original specification data of the power plant;

(b) developing a second thermal model of the power plant from measured performance data of each component of the power plant; and

(c) determining the performance impact of a selected component of the power plant on the overall thermal performance of the power plant by substituting design performance data of the selected component in the first thermal model with its measured performance data; and

(d) repeating step (c) for each component of the power plant.

19. (new) A method of determining performance impact of individual components of a power plant on overall thermal performance of the power plant, the method comprising:

(a) designing a first thermal model of the power plant using original specification data of the power plant;

(b) developing a second thermal model of the power plant from measured performance data of each component of the power plant;

(c) determining the performance impact of a selected component of the power plant on the overall thermal performance of the power plant by substituting design performance data of the selected component in the first thermal model with its measured performance data; and

(d) repeating step (c) until the performance impact of at least one other selected component of the power plant on the overall thermal performance of the power plant is determined.

20. (new) An apparatus for determining performance impact of individual components of a power plant on overall thermal performance of the power plant, comprising:

means for designing a first thermal model of the power plant using original specification data of the power plant;

means for developing a second thermal model of the power plant from measured performance data of each component of the power plant;

means for determining the performance impact of a selected component of the power plant on the overall thermal performance of the power plant by substituting design performance data of the selected component in the first thermal model with its measured performance data; and

means for repeating the determining step until the performance impact of at least one other component of the power plant on the overall thermal performance of the power plant is determined.

21. (new) A computer-based method for providing assistance to a user of an application program for assessing the performance impact of individual components of a power plant on overall thermal performance of the power-plant, the method comprising the steps of:

(a) using the application program to design a plant thermal model from original power-plant specification data;

(b) using the application program to design a matched thermal plant model from measured performance data of individual components of the power-plant;

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(c) substituting design performance data, of a selected component of the power plant, in the plant thermal model with its measured performance data; and

(d) repeating step (c) for at least one other selected component of the power plant.